oventrop

Hydronics

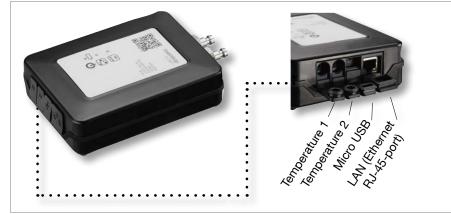
"OV-DMC 3" Measuring system



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Measurement at a double regulating and commissioning valve



Measurement at a double regulating and commissioning valve

The "OV-DMC 3" measuring system can be used in combination with Oventrop products with "classic" or "eco" measuring technique (e.g. "Hycocon", "Hydrocontrol" and "Cocon" as well as Oventrop metering stations).

The WLAN interfaces of the measuring system for communication with standard smartphones, tablets and personal computers enable an easy regulation of heating and cooling systems as well as a simple generation of measurement records.

Calculation of the presetting for an Oventrop double regulating and commissioning valve is possible after having entered the valve data and the required nominal flow rate. The permanent measurement of differential pressure and flow is possible, too. The measurement of two temperatures (e.g. supply and return) with the help of temperature sensors allows for a direct calculation of the heating capacity.



- Operation via commercial smartphones, tablets and PCs integrated WI AN
- integrated WLAN
- optional permanent measurement
 motor-operated bypass function for
- motor-operated bypass function for automatic deaeration of the device
- quickly rechargeable LiFe battery for a long operating time
- high differential pressure measuring range up to 2.5 bar

Technical data:

- Max. operating temperature: +120 °C
- Min. operating temperature: -20 °C
- Max. operating pressure: 20 bar (2000 kPa)
- Max. differential pressure: 2.5 bar
- (250 kPa) Temperature measuring range:
 - -20 °C up to +120 °C
- Temperature sensor type: PT 1000
- Power supply:
 - via LiFe rechargeable battery or enclosed USB power pack
- 230V AC 50/60 Hz - Dimensions W x H x D: 107x165x40 mm
- Weight: 650 g
- Protection class:
- Interface: WLAN

Minimum requirements on the display devices:

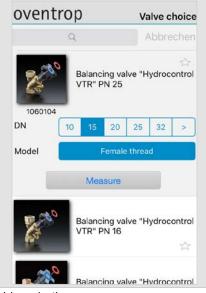
- Apple iPhone 4 with at least iOS 7.1
- Apple iPad 2 with at least iOS 7.1
- Android API devices with at least version 11 which corresponds to Android 3.0 (Honeycomb) and higher
- Windows with at least Win 7 and WLAN

IP 64

"OV-DMC 3" Measuring system Measuring methods



Measuring system in a sturdy case



Valve selection

oventro	ор в	Balanced pressure method				
	Dis	Disconnect Connection is established				
	Connectio					
200	VTR D	g valve "Hydrocontrol VTR" PN 25 DN 15 1060104				
Required flow	rate	200,0 Liter/h				
Setting		2,00				
Flow rate	[162,6 Liter/h				
Set the following new value and repeat measurement 2,30 Start confirmatory measurement						



Extent of supply of the "OV-DMC 3 with accessories

oventro)p Measure				
— • •	Disconnect				
	Connection is established				
Medium	Water				
*	Balancing valve "Hydrocontrol VTR" PN 25 DN 15 1060104				
Setting	2,00 - +				
kv value	0.720				
Differential pre	ssure 50,0 mbar				
Flow rate	161,0 Liter/h				
ts/tr	°C 🕗				
13:18:01 13:1	18:03 13:18:05 13:18:07 13:18:09 13:18:11				

Measurement of differential pressure, flow rate and temperature

oventrop	Computer method					
Balan	cing valve "H VTR" PN DN 15 106010					
Required flow rate		400,0 Liter/h				
Setting	2,00	4,00				
Differential pressure	51,0	52,0 mbar				
Flow rate	162,6	467,5 Liter/h				
Set the following new value and repeat measurement 3,60						
Start confirm	atory meas	surement				

"OV-DMC 3" Measuring system For measurement, transmission and determination of pressure, flow rate and temperature					
Model	Item no.				
without display device	1069278				

Measuring methods

The "OV-DMC 3" software with its different measuring methods serves the regulation of valves. Measured values (differential pressure/flow rate) are displayed and graphically represented. The flow and return temperature can be measured by connecting temperature sensors. The presetting values of the valve which are determined from the measured values, are displayed and recorded.

Balanced pressure method

The required flow rate is entered first and then the presetting value of the regulating valve. The new presetting obtained from measurement, is set at the valve and is checked by repeating the measurement. If necessary, a new measurement has to be carried out.

Computer method

As with the balanced pressure method, the required flow rate is set first. Now the regulating valve is set to any presetting value and a measurement is started.

Once the measurement has been completed, a second presetting value is set and the measurement is repeated. The presetting value for the required flow rate is determined by the software from the measured values. This value is set at the regulating valve and a confirmatory measurement is carried out. If the measured flow is in accordance with the specifications, the value can be entered into the regulation record.

kv value method

After having entered the kv value of the regulating valve, the flow rate is determined from the differential pressure measured in the current valve position.

alanced pressure method

Computer method

		Stations				
	Hydronics	Stations Storage cylinders Pipes	Potable water	Oil Solar	Smart Home Smart Building	

Presented by:

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